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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Benjamin David Foster

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SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH/EBAY

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EXAMINER

LEVINE, ADAM L

ART UNIT

PAPER NUMBER

3625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/25/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/689,970	Applicant(s) FOSTER ET AL.	
	Examiner Adam Levine	Art Unit 3625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>16 October 2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicants' response dated October 16, 2006, was filed in reply to the office action mailed June 13, 2006. In their reply applicants have amended claims 1-2,6,11-12,19,21,25, and 28. Claims 29 and 30 are newly added. Claims 1-30 are now pending. All pending claims will be treated in this office action. Examiner notes that applicant has filed a letter indicating the existence of application 11/323,486. Applicant describes 11/323,486 as a related application but does not indicate the relationship. The applications do not appear to be related as continuation or divisional applications of one another, nor do they appear to share the same parental lineage. Neither application is mentioned in the oath, declaration, datasheet, or specification of the other, nor do they claim priority to the same provisional application. The inventive entities are different, and in fact there is no overlap between inventors. The relationship is not understood, nor is the reason for bringing the application to the examiner's attention.

If applicants wish application 11/323,486 to be considered then it should be listed in a proper information disclosure statement. The letter filed October 16, 2006, does not constitute a proper information disclosure statement and does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information. It has been placed in the application file, but unless the reference has been cited by the examiner on form PTO-892, it has not been considered.

If applicants desire to claim priority to the earliest of the two applications under 35 U.S.C. 120, 121, or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR

1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

Response to Amendment

Pertaining to claim objections in the prior office action

Claims 1 and 11 were objected to because of informalities. In response to these informalities, in claim 1 applicants have inserted "one" after "at least," and in claim 11 applicants have inserted "of" after "plurality" as requested. These amendments have satisfactorily alleviated the basis for these objections.

Pertaining to rejection under 35 USC §112 in the previous office action

Claims 12 and 19 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The amendments to claim 12 partially resolve the rejection of claim 12 by clarifying the relationship between the popularity boundaries and the identified term and located listings. While it is now clear that the popularity boundaries are associated with the identified term, the change in the language in lines 4-5 has not clarified the difficulty regarding whether the listings are hosted by the network between popularity boundaries or whether the popularity boundaries are derived as a result of their association with the identified term. It cannot be determined whether the listings are initially located between popularity boundaries on the network that are then associated with the identified term, or whether the listings are on the network independently of popularity boundaries with the popularity boundaries derived later via their relationship with the identified term.

The amendment of claim 19 in accord with the examiner's previous comments has successfully overcome the previous rejection. The rejection of claim 19 under 35 USC §112 is withdrawn.

Response to Arguments

Pertaining to rejection under 35 USC §102 in the previous office action

Applicants' arguments filed October 16, 2006, have been fully considered but they are not persuasive. With regard to claims 1,21,25, and 28, applicants remark that they "cannot find in the cited portions of Hirooka 'identifying a term associated with a user interaction in the network-based commerce system, the identified term occurring within a search query'...". Hirooka cites this element at least at page 181, section 3.3.1 paragraphs 2-3 (Paper # 20060606, page 5 lines 4-6). The reference discusses the customer using different keywords to search in different categories. These are search queries containing terms. The isolated keywords are identified terms. The searching is an interaction. The examiner desires to aid the applicants in achieving a thorough understanding of his position, but is unable to contemplate any other way that this passage could be understood. The identified terms of the reference are derived from search queries as well as other sources. The fact that the reference includes additional steps does not distinguish the present application by virtue of it having fewer steps. Removal of the intermediate steps merely renders the claims broader than the presumed advancement taught by the prior art.

Regarding the popularity of search terms argued with respect to dependent claims 6 and 10, the requirement for repeat occurrence of terms is discussed in the previous office action (Paper # 20060606, page 5).

With regard to further remarks, applicants' arguments fail to comply with 37 CFR 1.111(b) and (c) because they amount to a general allegation that the claims

define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references and they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Examiner cites particular columns and line numbers in the references as applied to the claims for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the claims, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on October 16, 2006, was filed after the mailing date of the office action on June 13, 2006. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. The information disclosure statement fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be

listed. It has been placed in the application file, but the missing information referred to therein has not been considered. The information provided has been considered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. **Claims 1,10,21,25, and 28 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.**

Evidence that claims 1,10,21,25, and 28 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the reply filed October 16, 2006. In that paper, applicant has stated argument indicating that a new, unique, or at least different search query is created based on identified terms occurring within an original, first search query and that this new query is used to generate different recommendations than those resulting from the original search query. This indicates that the invention is different from what is defined in the claim(s) because claims 1,10,21,25, and 28 do not include any distinct reference to a new, unique, or at least different search query created based on identified terms occurring within an original, first search query. The claims in their current form suggest one search query and recommendations generated from keywords appearing in that query.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As discussed above, the language in the claim does not particularly point out and distinctly claim whether the listings are hosted by the network between popularity boundaries or whether the popularity boundaries are derived as a result of their association with the identified term. It cannot be determined whether the listings are initially located between popularity boundaries on the network that are then associated with the identified term, or whether the listings are on the network independently of popularity boundaries with the popularity boundaries derived later via their relationship with the identified term.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-2, 4-11, 21, and 23-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirooka (Hirooka, Y, et al., "Extending content-based recommendation by order-matching and cross-matching methods," Wletronic Commerce and Web Technologies, 4-6 Sept. 2000, PP. 177-90).

Hirooka teaches all the limitations of claims 1-2, 4-11, 21,23-28. For example, Hirooka discloses a method for generating listing recommendations to a user of a network-based commerce system, including generating queries from identified terms and terms generated from previous user interactions. Hirooka further discloses:

- identifying a term associated with a user interaction in the network-based commerce system: the identified term occurring within a search query (see at least abstract, p.181 section 3.3.1 para.2-3); user interaction includes searching a plurality of listings utilizing the search query (see at least p.181 section 3.3.1 para.2-3); user interaction includes transacting and the identified term occurs within a listing to which the transacting relates, including purchasing a product associated with one of the listings (see at least abstract, fig.3.1, p.181 section 3.2, p.182 section 3.3.2 para.1, p.184-185 section 3.5 para.2. Please note: as described and enabled in the present application's specification, bidding is synonymous with buying, which is synonymous with purchasing); identified term is selected based on its existence in a predetermined minimum number of user-generated search queries submitted to the network-based commerce system (see at least p.181 section 3.3.1 para.2-3. Please note: the predetermined minimum could be one. The method disclosed in the prior art requires at least one query and could apply to any number of queries, with the predetermined minimum also potentially representing the number of categories.), minimum number of search queries comprises search queries submitted by a plurality of users (see at least p.179 sections 2.1-2.2, p.180 section 3.1. Please note:

collaborative filtering requires a minimum number of users, each of whom has a profile generated as noted above, through the analysis of their queries); identified term comprises a plurality of words (see at least p.182 section 3.3.2 para.2-3 (series of nouns treated as a single keyword). Please note: the nature of the term is not functionally involved in the recited steps of the method. The method is the same regardless. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381 , 1385, 217 USPQ 401, 404 (Fed. Cir. 1983). MPEP 2106.).

- identifying the term includes: retrieving data related to a previous user interaction, determining category data related to a listing associated with the previous user interaction, retrieving at least one popular search term associated with the category data, and generating the recommended listing based on the popular search term (see at least abstract, fig.3.1, p.181 section 3.3.1 para.2-3, section 3.2; p.182 section 3.3.2 para.1, para.3; p.183 para.1, p.184-185 section 3.5 para.2. Please note: weighting keywords based on frequency of appearance is the same as determining popularity of the search term); determining if any one of a plurality of popular search terms match any portion of a title of a listing (see at least figs.3.3,3.4; p.182 section3.3.2); ranking the matches based on popularity of the popular search terms when a plurality of popular search terms match the title (see at least figs.3.3,3.4; p.182-183 section 3.3.2. Please note: For functional purposes, matching a keyword or search term to the title is the same as matching it to any other portion of the item's description. The title could

be defined as the description or at least part of the description. The distinction has no functional effect on the method. It is therefore not functionally involved in the recited steps of the method. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983). MPEP 2106.); selecting the popular search term ranked based on its ranking (see at least p.182-183 section 3.3.2.

- automatically generating a recommendation query including the identified term: (see at least abstract).
- running the recommendation query against a plurality of listings to identify at least one recommended listing: (see at least abstract, p.178 para.2).
- presenting the at least one recommended listing to a user of the network-based commerce system: (see at least p.178 lines 3-5, para.2).
- a communication engine: (see at least p.178 section 1 para.4).
- a database engine: (see at least p.177 section 1).
- a search engine: (see at least p.177 section 1).

Pertaining to system claims 21,23-24, and 28

Rejection of system claims 21,23-24, and 28 is based on the same rationale as noted above.

Pertaining to machine readable medium claims 25-27

Rejection of machine readable medium claims 25-27 is based on the same rationale as noted above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3, 12-20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirooka in view of Ryan (US Pub. No. 2003/0055831).

Hirooka discloses all of the above as noted under the 102(b) rejection. Hirooka teaches viewing a list of items purchased, viewing a list of items in response to search queries, and making recommendations based on both known information regarding purchases and known information regarding items that were not purchased, but Hirooka does not disclose user interaction including viewing the plurality of listings and the identified term is associated with the listings viewed, and does not disclose a server. Ryan discloses viewing a list of items in response to search queries, and recommendations based on both known information regarding purchases and known information regarding items that were not purchased, and also discloses user interaction including viewing the plurality of listings and the identified term is associated with the listings viewed (see at least abstract, figs.1A,2; p.1 para.0010, p.11 para.0194, p.18 para.0307-0308). Ryan further discloses at least one of the communication engine, database engine and the search engine are provided by at least one server (see at least p.1 para.0003). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Hirooka to incorporate user

interaction including viewing the plurality of listings and the identified term being associated with the listings viewed, and the server, as taught by Ryan, in order to pursue the objective of finding more recommendations are on target for the user, thereby increasing commerce using the method.

Hirooka discloses all of the above as noted under the 102(b) rejection. Hirooka teaches deriving terms from searches, using terms to generate recommendation queries, running the recommendation query against a plurality of listings to identify at least one recommended listing, and determining popularity of items previously selected. Hirooka, however, does not disclose locating listings with the located listings being between an upper popularity boundary and a lower popularity boundary wherein the upper popularity boundary and the lower popularity boundary are associated with the identified term, determining if the located listings meet at least one predetermined criterion, ranking the located listings meeting the predetermined criterion, and selecting a predetermined number of highest ranked listings for recommendation to the user. Ryan discloses deriving search terms from searches, using terms to generate new recommendation queries, running the query against a plurality of listings to identify at least one recommended listing, and determining popularity of items previously selected. Ryan also teaches locating listings with the located listings being between an upper popularity boundary and a lower popularity boundary wherein the upper popularity boundary and the lower popularity boundary are associated with the identified term, determining if the located listings meet at least one predetermined criterion, ranking the located listings meeting the predetermined criterion, and selecting a predetermined

number of highest ranked listings for recommendation to the user (see at least abstract, figs.1A,2,3A; p.1 para.0010; p.4 para.0077). Ryan further teaches:

- locating listings between an upper popularity boundary and a lower popularity boundary that are associated with the identified term: recommendation query includes the identified term, the lower popularity boundary, and the upper popularity boundary (see at least abstract, figs.1A,2,3A; p.1 para.0010; p.4 para.0077); lower popularity boundary comprises a corresponding parent level category of the identified term (see at least abstract, p.7 para.0116-0120, p.19 para.0341, p.20 para.0350).
- determining if the located listings meet at least one predetermined criterion: including listings that have a title that contains the identified term (see at least p.1 para.0005, p.9 para.0152. Also disclosed by Hirooka, see above 102 rejection. Please note: For functional purposes, matching an identified term to the title is the same as matching it to any other portion of the item's description. The title could be defined as the description or at least part of the description. The distinction has no functional effect on the method. It is therefore not functionally involved in the recited steps of the method. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381 , 1385, 217 USPQ 401, 404 (Fed. Cir. 1983). MPEP 2106.)); determining if the listing is designated by the network-based commerce system as a listing for mature audiences, is banned by the network-based commerce system (see at least p.14-15 para.0251); determining if the

listing would be returned in a search relying on the identified popular search term as the search criteria (see at least p.1 para.0005, p.9 para.0152. Also disclosed by Hirooka, see above 102 rejection.); determining if listing time remaining on the network-based commerce system is greater than a predetermined minimum time (see at least p.6 para.0104, p.15 para.0262, p.18 para.0317); determining if the listing is available to the user based on a site through which the user is registered (see at least p.3 para.0050, p.21-22 para.0393).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Hirooka to include locating listings between an upper popularity boundary and a lower popularity boundary that are associated with the identified term, determining if the located listings meet at least one predetermined criterion, ranking the located listings meeting the predetermined criterion, and selecting a predetermined number of highest ranked listings for recommendation to the user as taught by Ryan, in order to find more desirable recommendations for the user, thereby increasing commerce using the method.

Pertaining to system claim 22

Rejection of system claim 22 is based on the same rationale as noted above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam Levine whose telephone number is 571.272.8122. The examiner can normally be reached on M-F, 8:30-5:00 Eastern.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Smith can be reached on 571.272.6763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Adam Levine
Patent Examiner
January 16, 2007


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